

Installation Guidance Note: Needlefelt Forte Tiles

General advice

As with any floor covering, the appearance, performance and durability of the installed floorcovering will be determined to a large extent by the quality of the prepared subfloor and the conditions in which they are laid.

The installation of Needlefelt should be carried out in accordance with the National Code of practice for the installation of carpet floor coverings. Areas to receive flooring should be clean, free from other trades, fully enclosed and weather tight. Subfloors should be clean and free of contaminants, smooth, sound, even and permanently dry.

- Problems associated with plasticizer migration from PVC materials can lead to dimensional instability in needlefelt tiles. All subfloors of this type must be removed before installation.
- Forbo does not recommend installing over finished wood flooring products, such as parquet or wood strip flooring.

The open time of the adhesive will depend on site conditions and porosity of the base. It is best practice to conduct an adhesive bond test before starting the installation. Bond testing will assist in identifying both the working characteristics of the adhesive (waiting and working time) for the site conditions, and also any potential bonding problems.

Always conduct moisture tests on **all** substrates. All ground-based level floors should have an effective moisture barrier.

Areas to receive flooring shall be adequately lit to allow for proper inspection of the substrate, installation and for final inspection.

It is essential that the laying area is at a steady temperature of 18 to 27°C for 48 hours prior to, during, and for 24 hours after installation. Prior to installation, the needlefelt tiles must be allowed to acclimatise in opened boxes, no more than six boxes high, for at least 24 hours in the above conditions. This is particularly important if the tiles have been stored or delivered in conditions of extreme temperature and/or humidity. Where the floorcoverings have been stored or transported immediately prior to delivery in temperatures below 10°C the acclimatization period should be extended to 48 hours. Where national codes of practice exist, they take precedence over these guidelines.

Ensure that all recommendations for substrate and jobsite conditions are met prior to beginning the installation. Beginning the installation is an implied acceptance of site conditions by the parties involved and liability for any failure directly related to inadequate site conditions becomes the responsibility of the installer and/or flooring contractor.

As with all newly installed floor coverings Needlefelt should be protected from heavy traffic, particularly high point load wheeled traffic, for 72 hours.

Inspection

Prior to installation boxes should be checked to ensure that the correct colour, batch number and quantity have been received and that the material is in good condition. No claim will be accepted for incorrect colour, pattern or obvious damage if the material has been fitted.

Use material from the same batch/dye lot and install in boxes number sequence. The use of different production batches will always result in visible shade differences. The batch number is clearly marked on the material packaging and must be checked before commencement of installation.



Underfloor heating

Needlefelt tiles are excellent thermal insulators and this should be taken into account when using with underfloor heating systems. It is imperative that the underfloor heating systems have been commissioned and found to be functioning correctly prior to the floor finish being installed.

Forbo flooring products may be installed over underfloor heated floors providing the maximum surface temperature of the substrate does not exceed 27°C under any condition of use. To enable a secure bond of the adhesive to the substrate, the underfloor heating system should be turned off, or set to the lowest temperature, for a minimum of 48 hours prior to installation of the Forbo flooring material. The temperature of the substrate must not exceed 18°C during the installation of the flooring material. If necessary, an alternate heating source should be used to maintain the room temperature at a minimum of 18°C prior to, during, and for 72 hours after installation. The temperature of the underfloor heating system can be increased 72 hours following the installation. When raising the floor temperature, do so gradually so the substrate and flooring material can adapt to the temperature change together. A rapid temperature change could result in bonding problems.

Adhesive Recommendations and application

When installing Needlefelt Forte Tiles, a high grab, all-over tackifier adhesive system is recommended, such as Forbo Eurocol 542 Eurofix Tack Plus.

If alternative products are to be used consult with the supplier for more information, guidance and warranty.

The tackifier adhesive must be spread evenly over the entire floor area with particular attention to edges – this will ensure any perimeter tile cuts are fully bonded. Failure to fully bond all full tiles and tile cuts may result in individual tiles shifting and lifting

Where perimeter tiles are not constrained by fixtures e.g. walls, edge strips etc., it is recommended that such tiles are adhered using a permanent adhesive; Forbo Eurocol 540 Eurosafe Special is recommended.

Adhesives must be applied according to the manufacturer's instructions and it is essential that tackifier adhesives are allowed to dry to a clear, tacky finish before laying the needlefelt tile. Failure to do so could result in a permanent non-release bond.

Note: the tackifier must be applied with a suitable short pile roller to ensure full contact of the tile backing with the adhesive.

Note: adhesive coverage rates will be reduced on very porous subfloors such as plywood or sand cement screeds. Highly absorbent subfloors such as sand/cement screeds and plywood etc. should be primed; Forbo Eurocol 044 Europrimer Multi is recommended. If alternative products are to be used consult with the supplier for more information, guidance and warranty.

The primer should be allowed to dry fully before proceeding with the application of the adhesive.

Always clean away excess adhesive with a damp cloth before it is allowed to dry.

Do **NOT** use bleaching agents or strong solvents as they can be harmful to both people and to your floor.

Installation

The following instructions are intended to draw the fitter's attention to current "Best Practice", and must be followed for the relevant product guarantees to be valid. Installation must be carried out in accordance with the requirements of this guidance along with local codes of practice where applicable.

General

Tile edges may be more evident immediately after installation.

Note: these are not manufacturing defects, and after fitting and assuming normal prevailing conditions (under dynamic foot movement) this visual differential will diminish as the pile recovers to its natural position. Recovery will normally take place soon after installation. However, in some cases it can take up to six weeks for the pile to fully condition and develop a uniform visual appearance.



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Floor protection

Tiles should be protected from dirt and dust before, during and after installation. Failure to do so may affect the performance warranty. When using protective sheeting ensure that all edges are sealed to prevent building debris and dust settling on the needlefelt tiles.

Conditioning

Prior to installation, the needlefelt tiles must be allowed to acclimatise in opened boxes in the laying area at a steady temperature of 18 to 27°C, no more than six boxes high, for at least 24 hours. This is particularly important if the tiles have been stored or delivered in conditions of extreme temperature and/or humidity.

Setting Out

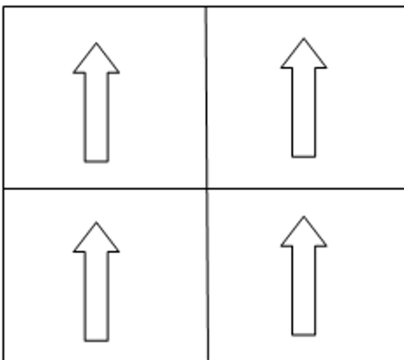
The location of the starting point in an installation is usually determined by the fitter to maximize the yield. This may be anywhere in the room but would normally be located as near to the true centre as possible. Small cuts in either the field or perimeter should be avoided.

Having established the starting point for the installation, making some check measurements or dry laying a few rows of tiles will help to identify any potential problems or necessary adjustments to avoid small perimeter cuts.

Direction of laying

The tiles should be laid monolithic only (same direction). The arrow marks on the reverse of every tile indicate the direction of tile laying. The preference of the specifier in case of other visual effects must be confirmed before tiles are installed.

Forte tiles :



Monolithic installation of tiles is required.

When laying tiles in a monolithic format follow the direction of the arrows, which should, where possible, point towards the main light source.

The recommended installation direction for each design is also confirmed in the product brochures and packaging and printed on the underside of each tile.

Fitting tiles

Ensure that each tile butts up to its neighbour as tightly as possible without placing the tile under any pressure which may cause peaking.

Fitting edge tiles and cuts

It is important when fitting tiles and cuts to skirting boards or other fixed perimeters that the tile/cut is fitted to any fixed perimeter without exerting any pressure. Any tiles/cuts fitted under pressure may be subject to lifting from the tackifier adhesive – this will cause loss of bond to that tile/cut and the surrounding installation area.

Immediately after laying the tiles, evenly roll over the surface with a minimum 50kg pressing roller to ensure an even finish.



FLOORING SYSTEMS

Fitting to stair treads and risers

Appropriate stair nosing must be used for every tread. Tiles must be bonded securely to the stair tread using a permanent bond adhesive (Forbo Eurocol 540 Eurosafe Special).

Tiles to risers should be permanently bonded using a suitable contact adhesive.

It is important that tiles are fitted to treads with the pile direction (arrows) facing inwards towards the riser and fitted to risers with the pile direction (arrows) facing downwards towards the tread.

On completion of the installation

First impressions may have more impact on the client than hours of skilled fitting.

The completed installation should be cleared of scrap material and debris, the floor vacuumed, and any traces of adhesive residues removed from the floor and skirtings.

Note: Upright vacuum cleaners with a mechanically powered brush should be used on all needlefelt tiles.

Needlefelt is occupancy ready immediately after installation.

If the floor covering is to be protected from other trades or site traffic prior to project completion, a protection product should be chosen that is appropriate for the type and level of traffic likely to be experienced and the potential for impact, scratching or indentation damage.

Note: some protective sheet products with a tacky film in contact with the textile floor coverings can leave an adhesive residue when removed. This can be difficult to remove and attract dirt when the floor covering is put into use. The potential for this effect should be checked with the protection product manufacturer before use and advice on suitability confirmed. Forbo will not accept any claims for soiling problems associated with the use of such products

In many cases it is customary for the initial floor preparation to be left, or subcontracted, to a professional cleaning and maintenance contractor who will have the staff and equipment to do the job thoroughly.

If the optimum performance of any new floor covering is to be achieved, it is important that the correct cleaning and maintenance procedures are used from day one. Cleaning and maintenance guides for all Forbo Flooring products are available for download at: www.forbo-flooring.com/download-center

Cleaning and maintenance guides should be passed onto the main contractor, client or end user as appropriate on completion of the installation, and before any hand over clean is started.

Performance and Construction

These details vary according to needlefelt selection. Refer to Forbo Flooring Product Literature for further information.

If in any doubt contact us:

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